

BACKGROUND

Osteoarthritis, or degenerative joint disease, is the most common form of arthritis. It affects up to 20 million Americans, most of them elderly. Symptoms include pain, stiffness and swelling in the joints. Scientists once thought the disease resulted simply from “wear and tear” on the joints; now they are exploring a complex web of biological factors that may contribute to cartilage breakdown.

WHAT VA IS DOING

VA researchers are working on understanding the biological causes of cartilage degeneration and testing new drugs and other medical and rehabilitative treatments for arthritis.

Highlights of current or recent research include the following:

- **Popular remedies put to the test**—A VA clinical trial is testing two dietary supplements billed as treatments for osteoarthritis. Nearly 1,600 veterans with arthritis of the knee will take glucosamine sulfate, chondroitin sulfate, a combination of both, or placebo. Doctors will periodically take X-rays to check for cartilage damage and monitor pain symptoms. Results are expected in 2006.
- **Combination therapy good for high-risk patients**—Using a sophisticated software model, researchers at the Greater Los Angeles VA and UCLA showed that the safest, most cost-effective medical treatment for arthritis sufferers at high risk for gastrointestinal problems may be a nonsteroidal anti-inflammatory drug combined with an acid-reducing drug, rather than a Cox-2 inhibitor alone. Cox-2 inhibitors, recently the subject of controversy because of their side effects, have been recommended in recent years as the first-line treatment for these patients.
- **Rebuilding cartilage**—Lab scientists in Palo Alto showed that hydrostatic pressure on cartilage cells could stimulate the formation of collagen, the protein essential for cartilage regeneration.

For more information on VA research:

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